Appln. No. 10/517,553 Amendment Reply to Office Action dated May 3, 2006

## **REMARKS**

These remarks are in response to the Office Action dated May 3, 2006. Applicant hereby requests a three month extension of time. The Commissioner is hereby authorized to charge the extension fees to Deposit Account No. 50-0951.

At the time of the Office Action, claims 1-15 were pending in the application. In the Office Action, claims 8, 9 and 12-15 rejected under 35 U.S.C. §112, second paragraph. Claims 1, 2, 4 and 7 were rejected under 35 U.S.C. §102(b). Claims 5, 6, 10 and 11 were rejected under 35 U.S.C. §103(a). The rejections are discussed in more detail below.

## I. Rejection under 35 U.S.C. §112, second paragraph

Claims 8, 9 and 12-15 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claims 8, 9 and 12 depend from themselves. Appropriate correction have been made. Accordingly, withdrawal of the rejection is respectfully requested.

## II. Claim Rejections on Art

Claims 1, 2, 4 and 7 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,762,887 to Girod et al. ("Girod"). Claims 5, 6 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Girod in view of U.S. Patent No. 6,460,614 to Hamert et al. Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Girod in view of U.S. Patent No. 5,035,867 to Dang Vu et al.

The heat exchange unit of the present claims is of the so-called multi service type. Contrary to what is stated in the Office Action, the reactor disclosed in Girod is not capable of multi service use since it is provided only with a single inlet nozzle and a single outlet nozzle of a same (single) heat exchange fluid. See for instance figure 5, reference signs 33 and 35 and column 10, lines 53 and 55. Therefore, this reactor cannot be compared or confused with the claimed multiservice heat exchange unit. The multiple catalyst input pipes 46 and the multiple reactant fluid input pipes 42 (WP346477;1)

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of Girod do not lead to separate chambers, and cannot therefore be used in multi service use. In particular, the reactant fluid enters the apparatus through an inlet pipe 42, flows into one of the vertical segments of the apparatus (feed zones 37a, 37c or 37e) and crosses the reaction stacks 36 containing the catalyst, flowing horizontally to the adjacent vertical segment (recovery zones 37b, 37d or 37f), where it may exit the apparatus at the bottom at the fluid discharge pipe 41. There is nothing stopping fluid flowing both ways from one feed zone into the two adjacent recovery zones, as there are no physical barriers to such flow. The heat exchange fluid "usually fills the vessel 31 and surrounds the reaction stacks 36" (see col. 12, lines 40-41), and may travel vertically through the reactor stacks 36 via the circuit B defined in Figs. 3 and 4. The heat exchange fluid is thus in direct contact with reactant fluid.

Thus, as described with reference to figures 8 and 9 and corresponding description, the reactor of Girod is structured so as to provide for a single heat exchange service through the circulation circuit B. This is given by the presence of a single inlet and outlet nozzle 33, 35, respectively, and by the fact that the heat exchangers are not grouped in groups of predetermined number but on the contrary they are all connected to a same inlet and outlet (i.e. they form all together a single group). This is also confirmed in Girod by the use of the article "the" with reference to the heat exchange fluid thus making clear that a single heat exchange fluid is circulated in the disclosed reactor (see for instance column 10, line 55).

In contrast, amended claim 1 recites that a group of a predetermined number of plate exchangers share an inlet and outlet so that said group of said plate heat exchangers defines and supplies one of the predetermined services provided by the multiservice heat exchange unit, and that different heat exchange services are combined inside the shell. Therefore, the features of a "multiservice" heat exchange unit, wherein "a group of a predetermined number of said plate heat exchangers...and different heat exchange service are combined inside said shell", recited in present claim 1 cannot be found in the cited prior art.

From the above, it is thus evident that Girod does not disclose nor suggest a multiservice heat exchange unit as recited in claim 1, which is thus believed to relate to patentable subject matter, and to be in condition for allowance. The dependant claims are also believed allowable

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because of their dependence upon an allowable base claim, and because of the further features recited.

## III. Conclusion

Applicants have made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicants invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicants respectfully request reconsideration and prompt allowance of the pending claims.

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